

Abstract

To provide an inspection method that makes it possible to inspect continuity or the like of a circuit element in a semiconductor device from observation with a scanning charged particle microscope such as an electron microscope without troublesome work like random access operation of a probe, and providing a system that realizes the inspection method.

A method for inspecting an electronic circuit of the invention uses a composite apparatus including an electron gun 2, an ion beam gun 1, and a secondary charged particle detector 4 to observe on a micro-scale contrast change on a sample surface in the case in which the surface of a sample semiconductor device is irradiated with an electron beam or a positively charged ion beam to charge the sample surface highly, and in the case in which a desired pattern in an area in the highly charged state is irradiated with a charged ion beam or an electron beam of opposite charge.